CLAIMS

What is claimed is:

1. A method for accessing a data processing system behind a network address translation (NAT) enabled network, comprising:

querying, from a client system located outside a NAT enabled network, a NAT device for an address of a NAT data processing system located behind said NAT enabled network;

automatically routing said query through said NAT device to a DNS server, wherein said DNS server returns an address for said NAT data processing system and source routing for said NAT device; and

sending packets, from said client system to said NAT data processing system at said address with source routing through said NAT device, such that said NAT data processing system behind said NAT enabled network is directly accessed by said client system from outside said NAT enabled network.

2. The method according to claim 1 for accessing a data processing system behind a NAT enabled network, wherein said querying a NAT device for an addresses of a NAT data processing system further comprises:

receiving a user request to establish a connection with a particular domain name, wherein said domain name identifies said NAT data processing system; and

sending a DNS query of said domain name to said NAT device.

3. The method according to claim 1 for accessing a data processing system behind a NAT enabled network, wherein said querying a NAT device for an addresses of a NAT data processing system further comprises:

sending, from said client system, a DNS query for a domain name of said NAT data processing system to a first address; and

responsive to receiving a fail signal, sending, from said client system, said DNS query to a second address accessed from a resolv.conf file, wherein said second address is a location for said NAT device.

4. The method according to claim 1 for accessing a data processing system behind a NAT enabled network wherein automatically routing said query through said NAT device to a DNS server, further comprises:

automatically routing said query through a pre-selected port of said NAT device for handling DNS queries.

5. The method according to claim 1 for accessing a data processing system behind a NAT enabled network wherein automatically routing said query through said NAT device to a DNS server, further comprises:

automatically routing said query to said DNS server that stores at least one private address for at least one private system located behind said NAT enabled network and said source routing for said NAT device.

6. The method according to claim 1 for accessing a data processing system behind a NAT enabled network further comprising:

returning, from said DNS server, a plurality of addresses of a plurality of parallel data processing systems to said NAT data processing system located behind said NAT enabled network; and

responsive to receiving a fail signal from an attempt to send packets to said NAT data processing system, sending packets to a first data processing system from among said plurality of parallel data processing systems at one of said plurality of address with source routing through said NAT device.

7. The method according to claim 1 for accessing a data processing system behind a NAT enabled network further comprising:

authenticating an identity of a user at said client system;

only allowing access to said NAT data processing system if said authenticated identity of said user matches one of a plurality of authenticated users enabled to access systems behind said NAT enabled network.

8. A system for accessing a data processing system behind a network address translation (NAT) enabled network, comprising:

a client system communicatively connected to a public network;

a NAT device accessible to said public network and accessible to at least one NAT data processing system located in a NAT enabled network behind said NAT device;

querying means for querying said NAT device, from said client system, for an address of a particular NAT data processing system located behind said NAT enabled network from among said at least one NAT data processing system;

routing means for automatically routing said query through said NAT device to a DNS server, wherein said DNS server returns an address for said NAT data processing system and source routing for said NAT device; and

transmission means for sending packets, from said client system to said particular NAT data processing system at said address with source routing through said NAT device.

9. The system according to claim 8 for accessing a data processing system behind a NAT enabled network, wherein said querying means further comprises:

receipt means for receiving a user request to establish a connection with a particular domain name, wherein said domain name identifies said NAT data processing system; and

transmission means for sending a DNS query of said domain name to said NAT device.

10. The system according to claim 8 for accessing a data processing system behind a NAT enabled network, wherein said querying means further comprises:

transmission means for sending, from said client system, a DNS query for a domain name of said NAT data processing system to a first address; and

transmission means for sending, from said client system, said DNS query to a second address accessed from a resolv.conf file, wherein said second address is a location for said NAT device, responsive to receiving a fail signal.

11. The system according to claim 8 for accessing a data processing system behind a NAT enabled network wherein said DNS server is communicatively connected to said NAT device through a preselected port for routing address queries.

12. The system according to claim 8 for accessing a data processing system behind a NAT enabled network wherein said routing means further comprises:

means for automatically routing said query to said DNS server that stores at least one private address for at least one private system located behind said NAT enabled network and said source routing for said NAT device.

13. The system according to claim 8 for accessing a data processing system behind a NAT enabled network further comprising:

means for returning, from said DNS server, a plurality of addresses of a plurality of parallel data processing systems to said NAT data processing system located behind said NAT enabled network; and

transmission means for sending packets to a first data processing system from among said plurality of parallel data processing systems at one of said plurality of address with source routing through said NAT device, responsive to receiving a fail signal from an attempt to send packets to said NAT data processing system.

14. The system according to claim 8 for accessing a data processing system behind a NAT enabled network further comprising:

means for authenticating an identity of a user using said client system at said NAT device;

means for only allowing access to said NAT data processing system if said authenticated identity of said user matches one of a plurality of authenticated users enabled to access systems behind said NAT enabled network.

15. A computer program product for accessing a data processing system behind a network address translation (NAT) enabled network, comprising:

a recording medium;

means, recorded on said recording medium, for querying a NAT device for an address of a NAT data processing system located behind said NAT enabled network;

means, recorded on said recording medium, for automatically routing said query through said NAT device to a DNS server, wherein said DNS server returns an address for said NAT data processing system and source routing for said NAT device; and

means, recorded on said recording medium, for sending packets to said NAT data processing system at said address with source routing through said NAT device.

16. The computer program product according to claim 15 for accessing a data processing system behind a NAT enabled network, wherein said means for querying a NAT device for an addresses of a NAT data processing system further comprises:

means, recorded on said recording medium, for receiving a user request to establish a connection with a particular domain name, wherein said domain name identifies said NAT data processing system; and

means, recorded on said recording medium, for sending a DNS query of said domain name to said NAT device.

17. The computer program product according to claim 15 for accessing a data processing system behind a NAT enabled network, wherein said means for querying a NAT device for an addresses of a NAT data processing system further comprises:

means, recorded on said recording medium, for sending, from said client system, a DNS query for a domain name of said NAT data processing system to a first address; and

means, recorded on said recording medium, for sending said DNS query to a second address accessed from a resolv.conf file, wherein said second address is a location for said NAT device, responsive to receiving a fail signal from said first address.

18. The computer program product according to claim 15 for accessing a data processing system behind a NAT enabled network wherein said means for automatically routing said query through said NAT device to a DNS server, further comprises:

means, recorded on said recording medium, for automatically routing said query through a pre-selected port of said NAT device for handling DNS queries.

19. The computer program product according to claim 15 for accessing a data processing system behind a NAT enabled network wherein said means for automatically routing said query through said NAT device to a DNS server, further comprises:

means, recorded on said recording medium, for automatically routing said query to said DNS server that stores at least one private address for at least one private system located behind said NAT enabled network and said source routing for said NAT device.

20. The computer program product according to claim 15 for accessing a data processing system behind a NAT enabled network further comprising:

means, recorded on said recording medium, for returning a plurality of addresses of a plurality of parallel data processing systems to said NAT data processing system located behind said NAT enabled network; and

means, recorded on said recording medium, for sending packets to a first data processing system from among said plurality of parallel data processing systems at one of said plurality of address with source routing through said NAT device, responsive to receiving a fail signal from an attempt to send packets to said NAT data processing system.

21. The computer program product according to claim 15 for accessing a data processing system behind a NAT enabled network further comprising:

means, recorded on said recording medium, for authenticating an identity of a user using said client system at said NAT device;

means, recorded on said recording medium, for only allowing access to said NAT data processing system if said authenticated identity of said user matches one of a plurality of authenticated users enabled to access systems behind said NAT enabled network.